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# DEMOGRAPHIC ASPECTS OF URBANIZATION IN THE ECAFE REGION

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## SUMMARY

The ECAFE region as a whole is one of the least urbanized regions of the world. With the exception of Japan, Hong Kong, and Malaya - Singapore, the countries of this region are in an early stage of the urbanization process through which the industrialized Western countries have passed in the course of their economic development during the last 150 years. Although the urban population is still small in proportion to the total population of these countries, the proportion is increasing, in some cases at an accelerating rate. It remains to be seen whether the urbanization of the ECAFE countries in the future will follow the same course observed in the West. There are some reasons for expecting that the rate and timing of the increases in urban population in this region may differ from the experience of the Western countries.

The character of recent urban growth has not been the same in all countries of the ECAFE region. In a number of them it has been primarily the growth of a few large cities containing an increasing proportion of the country's total population; in others, cities of various sizes have been growing, both with respect to the absolute number of their inhabitants and their share of the country's total population.

Because of the scarcity of statistics and their generally poor quality, it is not possible to draw general conclusions about the characteristics of the urban population in the region as a whole. However, a few traits are fairly common among countries for which good statistics can be obtained.

The very large cities in these countries generally have a disproportionately large male population, especially males aged 15 to 39 years. In addition a larger share of adults of working age and a smaller share of children and aged persons is found in the population of these great cities than in the remainder of the countries where they are located. This feature, which results mainly from selective migration between the city and the hinterland, contributes to the economic advantage of the city dwellers.

In some of the ECAFE countries, mortality, both of infants and of the population in general seems to be higher in the cities than in the rural areas, but in other cases the difference appears to be in the other direction. The

statistics of mortality in the ECAFE region generally are not well enough developed to permit any valid generalizations as to whether the urban or the rural population is in a more favourable position with respect to this important aspect of the conditions of life. It is evident, however, that the mortality rates both in the urban and the rural areas of many ECAFE countries are still relatively high by the standard of recent experience in the most advanced countries of the West, in spite of the gains in the important progress recently made in cutting down death rates throughout most of the region.

The statistics relating to fertility are also insufficient to permit broad generalizations with regard to urban-rural differences in the ECAFE region. In Japan, birth rates at present are distinctly lower than those of other ECAFE countries, and it is the urban areas of Japan which exhibit the lowest fertility. Elsewhere in the region, so far as can be judged from the inadequate statistics, the fertility of both rural and urban communities is generally high. However, at least in some of the largest cities, fertility has recently been lower than in the surrounding rural communities. Thus the cities of the ECAFE region outside Japan may have begun, in some cases and in some measure, to play the role of leaders in the small-family movement which the cities previously enacted in Japan and in the West.

JOINT UN-UNESCO SEMINAR ON URBANIZATION IN THE ECAFE REGION

# Demographic Aspects of Urbanization in the ECAFE Region [1]

## Introduction

This paper is intended to give a general statistical picture of urbanization in the ECAFE region and to present an analysis of its principal demographic characteristics.

From the demographic point of view, urbanization occurs when the proportion of the population living in "urban" agglomerations increases. Thus, of two countries, the more urbanized is the one in which the proportion of the population living in "urban" localities is highest. This simple definition raises the problem of the determination of what is urban. In fact, the difficulties encountered in the study of urbanization relate not so much to its definition as to its measurement. The distinctions which are made in the censuses between the urban population and the rural population do not permit a comparative study of the phenomena, the definitions varying considerably from one country to the next. This is apparent from the widely divergent classifications of urben and rural that are employed by ECAFE countries alone; in Korea only localities of 40,000 and more inhabitants are defined as urban, but in the Federation of Malaya, a village of 1,000 inhabitants is reported as urban in the census.

However arbitrarily the line between the city and the rural area is drawn, the study of urbanization would be greatly facilitated by the adoption of a common definition, in the censuses, of the urban and the rural population [2]. The Population Commission of the United Nations recommended that standard definitions be adopted in this connexion by the different countries [3]. Moreover, most of the censuses define as urban small localities whose economic and social characteristics are more in keeping with rural than with urban traits. With

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1/ This paper was prepared by the Population Branch of the Bureau of Social Affairs of the United Nations.

2/ See: United Nations, Data on Urban and rural populations in recent censuses. Population Studies N°.18. Lake Success, New York, July 1950.

3/ United Nations. Report of the Population Commission (4th session), Document N°. E/1313, p. 26.

a few exceptions, notably Japan and Korea, most of the ECAFE countries recognize as urban, places of 5,000, 2,500 or 1,000 inhabitants, depending on the country. This practice is not followed exclusively in ECAFE countries; Denmark, which is an extreme case among European countries, defines as urban all places of at least 250 inhabitants.

In order to avoid these difficulties, most studies use as an "index of urbanization" the percentage of the population living in localities of such a size that their being urban in character is indisputable. For the purpose of this paper, we shall use wherever possible the proportion of the population living in localities of 20,000 and more inhabitants as the urban index.

It is important to state precisely the significance of the urban indexes. These indexes permit the measurement of the spread of urbanization but it does not follow that countries having rather low indexes have not experienced very intense problems associated with urbanization. India offers a good example of a country which has a low urbanization index but which contains a number of great metropolitan cities, such as Calcutta and Bombay.

It is seldom possible to distinguish, in the censuses, between the city proper and its suburbs. Moreover, urbanization quite often takes the form of the extension of cities into their suburbs and this is not always properly recorded by the census.

On the other hand, it should not be concluded that the data on urban and rural populations provided by the censuses are useless. If they do not permit a real measurement of these two components of the population, they do allow in the absence of more precise data, the study of certain characteristics common to each. This point was emphasized in the last issue of the United Nations Demographic Yearbook 1/, as follows: "Despite their shortcomings, however, statistics of population by urban and rural are useful for comparing on a broad scale degrees of urbanization between countries or territories. No matter how they are defined, 'urban' is likely to include a heavy concentration of clearly urban population, while 'rural' will be heavily weighted toward village or clearly rural areas. Thus, the differences between urban and rural characteristics

1/ United Nations Demographic Yearbook 1955. New York, 1955, p. 16.

of the population, though not precisely measured, will tend to be reflected in the statistics". Especially for the study of demographic characteristics where the scarcity of data prohibits an intensive study of the differentials, the distinction between urban and rural populations provided by the censuses, remains the primary source of information.

## Part I: Description of the Phenomena of Urbanization in the ECAFE Region

### A. The position of the region in respect to the world situation

The population of the countries represented at this seminar was, in 1954, around 1,387,000 1/ out of a total of 1,451,000 for the continent of Asia, i.e., 96 per cent of this total.

What is the extent of urbanization in this region as compared with the other broad regions of the world ? As previously indicated, a comparative study can be undertaken only if one utilizes - somewhat arbitrarily of course - a standard index which permits the measurement of the phenomenon. Table I contains for the broad geographical regions of the world, these "urbanization indexes" which represent the proportions of the populations living in localities of 20,000 and more inhabitants and in those of 100,000 and more inhabitants. The figures relate to 1950, the last year for which such estimates are available.

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1/ Unofficial estimate including the People's Republic of China.

TABLE I. Percentages of urban population in major world areas, 1950*

| | Percentage of total population in cities 20,000 and more | Percentage of population in cities 100,000 and more | Percentage of the "city population" living in places of 100,000 and more 5/ |
|---|---|---|---|
| World | 21 | 13 | 62 |
| Oceania | 47 | 41 | 87 |
| North America 1/ | 42 | 29 | 69 |
| Europe 2/ | 35 | 21 | 60 |
| USSR | 31 | 18 | 58 |
| South America | 26 | 18 | 69 |
| Central America 3/ | 21 | 12 | 57 |
| Asia 4/ | 13 | 8 | 63 |
| Africa | 9 | 5 | 51 |

1/ Includes U.S.A. and Canada.

2/ Without USSR.

3/ Includes countries of Central America, Mexico and the Islands of the Caribbean.

4/ The ECAFE countries representing 96 per cent of Asia, this region has not been shown separately. The corresponding figures for ECAFE region are 12.7, 8.1 and 64 per cent, respectively.

5/ "City population" refers to the population living in places of 20,000 and more.

* Source : Kingsley Davis and Hilda Hertz. The world distribution of urbanization. Bulletin of the International Statistical Institute, Vol. XXXIII, Part IV, p. 227-242.

It may be seen that, in spite of the rapid urbanization currently under way, the world is still essentially rural; 80 per cent of its population live in localities of less than 20,000 inhabitants.

Taken in its entirety, Asia is the least urbanized region of the world, excluding Africa. In 1950 approximately nine-tenths of its population were living in localities of less than 20,000 inhabitants and only 8 out of every 100 persons resided in cities of 100,000 and more.

If the urbanization index for the world is taken as a norm, a line may be drawn between developed and under-developed regions. There are three regions for which the index is either equal to or lower than the world index: Central America, Asia and Africa, i.e., roughly the under-developed regions of the world. However, there is one important exception, South America, an area which has attained a high degree of urbanization in view of its economic level. This dividing line is also observed within the regions when the degree of economic and social development and the degree of urbanization are compared for the different countries.

Data showing the ratio between the population living in localities of 100,000 and more inhabitants and that living in places of 20,000 and more inhabitants are presented in the last column of Table I. These ratios represent the proportion of the urban population that is concentrated in the very large cities. With the exception of Oceania and Africa, which represent extreme cases, the range is not very great, being only from 57 to 69 per cent. In Asia somewhat less than two-thirds of the city population is found in agglomerations of 100,000 and more inhabitants.

The preceding table shows the degree of urbanization in the different regions of the world but these data do not indicate the share of the world's urban population which each region contains. Statistics which indicate this distribution together with figures showing the world's population by region are presented in Table II.

TABLE II. Distribution of urban population by broad regions, 1950.

| | Total population | Population living in cities of 20,000 and more | Population living in cities of 100,000 and more |
|---|---|---|---|
| | % | % | % |
| World | 100 | 100 | 100 |
| Asia | 53.2 | 33.8 | 33.7 |
| Europe | 16.4 | 27.5 | 26.5 |
| North America | 6.8 | 13.9 | 15.2 |
| USSR | 8.1 | 12.0 | 11.2 |
| South America | 4.6 | 5.8 | 6.5 |
| Africa | 8.2 | 3.7 | 3.2 |
| Central America | 2.1 | 2.1 | 2.0 |
| Oceania | 0.5 | 1.2 | 1.6 |

Thus, it may be observed that 47 per cent of the population of Oceania is urban but that this 47 per cent represents only 1.2 per cent of the world's urban population. By contrast, the 13 per cent of the Asian population that is considered urban accounts for one third of the total urban population of the world.

Attention is again drawn to the three regions which contain a proportion of the world's urban population either equal or inferior to their share of the

world's total population, i.e. Central America, Asia and Africa. The total population of these regions comprises approximately two-thirds of the total population of the world. As far as Asia is concerned, it contains more than half of the world's population but merely a third of the world's urban population.

B. Analysis by country

Comparable estimates for the countries of the ECAFE regions are available only for 1950. Beyond this year the available data are fragmentary and insufficient for a comparative study of the countries of this region. The more recent data will be given later.

Table (3) gives, in numbers and percentages, the urban population of all countries of the region as well as the total population and the percentage of the urban population that is found in cities of 100,000 and more inhabitants. The countries are listed in decreasing order according to their degree of urbanization.

TABLE III. Total population and urban population of the countries of the ECAFE region - 1950

| | Total population 1950 (thousands) | Population in places of 20,000 and more (000's) | % of total population | Population in places of 100,000 and more (000's) | % of total population | % of urban population living in places of 100,000 and more |
|---|---|---|---|---|---|---|
| Hong Kong | 2,260 | 2,124 | 94.0 | 2,124 | 94.0 | 100 |
| Japan | 82,900 | 35,000 | 42.1 | 21,222 | 25.6 | 60.3 |
| Malaya Fed. of | 5,227 | 1,621 | 31.0 | 1,118 | 17.9 | 69.1 |
| Singapore | 1,210 | | | | | |
| Korea | 29,09 | 5,557 | 19.0 | 3,876 | 13.2 | 69.4 |
| N. Korea | [8,18 ] | [1,782] | [20.2] | [861] | 9.8 | [48.5] |
| S. Korea | [20,911] | [3,815] | [18.5] | [3,015] | [14.7] | [79.4] |
| Brunei | 46 | | | | | |
| North Borneo | 348 | 134 | 14.0 | 0 | 0 | |
| Sarawak | 562 | | | | | |
| Philippines | 19,881 | 2,523 | 12.7 | 1,013 | 5.1 | 40.1 |
| India | 358,000 | 42,960 | 12.0 | 23,628 | 6.6 | 55.0 |
| Ceylon | 7,554 | 860 | 11.4 | 407 | 5.4 | 47.3 |
| Burma | 18,489 | 1,850 | 10.0 | 924 | 5.0 | 50.0 |
| China (excl. Taiwan) | [ ,000] | | | | | |
| Taiwan | 7,477 2/ | 56,448 | 10.0 | 39,515 | 7.0 | 70.0 |
| Indonesia | 75,500 | 6,870 | 9.1 | 5,285 | 7.0 | 76.9 |
| Cambodia | 3,8 5 2/ | | | | | |
| Laos | 1,200 2/ | 2,400 | 8.[illegible] | 1,950 | 6.5 | 81.2 |
| Viet-Nam 3/ | 25,000 2/ | | | | | |
| Pakistan | 75,040 | 5,853 | 7.8 | 3,602 | 4.8 | 61.5 |
| Thailand | 18,405 | 1,410 | 7.6 | 1,227 | 6.7 | 88.1 |
| Afghanistan 1/ | 12,000 | 540 | 4.5 | 204 | 1.7 | 37.7 |
| Nepal | 7,000 2/ | 308 | 4.4 | 210 | 3.0 | 68.1 |
| ECAFE Region | 1,500,071 | 166,49[illegible] | 11.7 | 100,309 | 8.1 | 63.7 |
| Total Asia | 1,368,000 | 179,208 | 13.1 | 113,544 | 8.3 | 63.3 |

1/ 1951

2/ Unofficial estimate

3/ Comprising former Annam, Cochin-China and Tonkin.

K. Davis has classed as "highly urbanized" those countries having at least 25 per cent of their population living in agglomerations of 20,000 and more inhabitants and at least 15 per cent in agglomerations of 100,000 and more inhabitants. By adopting the same criteria, of all ECAFE countries only Japan, Hong Kong and the Federation of Malaya (including Singapore), may be considered highly urbanized. Together they comprise only 7 per cent of ECAFE's total population while sharing among them one quarter of the urban population of this area. Korea is the next most urbanized country, having nearly one-fifth of its population in places of 20,000 plus. China and India represent 70 per cent of the population of this region and yet they have only 10 per cent and 12 per cent, respectively, of their populations in localities of 20,000 and more inhabitants and 7 per cent in the large cities (100,000 and more inhabitants).

The extent of concentration of the urban population in metropolitan cities (shown in the last column of the table as the proportion of the urban population living in cities of 100,000 and more) varies to some extent according to country. The only other pertinent observation is that the proportion tends, with a few important exceptions, to be higher at the two extremes of the classification. In certain very lightly urbanized countries, the existence of one of several large cities containing nearly all of the urban population and the absence of cities of small or average size has been observed, and this is suggested as a partial explanation of the phenomena described above. Unfortunately, the available data do not permit an intensive study of the distribution according to size of locality. According to the United Nations Statistical Office "statistics of population classified by size of locality are subject to all the limitations which arise from the various national definitions of localities".1/

With these reservations in mind, Table IV presents for six countries of the ECAFE region, the percentage of the total population living in each of three broad classes of urban localities. Figures relating to the distribution of the urban population according to these categories are shown in parenthesis.

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1/ United Nations Demographic Yearbook, 1955, p. 16.

TABLE IV. Percentage distribution of population by size of locality for six ECAFE countries

| | | Total population | Size of locality: 100,000 and more | 50,000 99,999 | 20,000 49,999 | % of population living in places of 20,000 and more |
|---|---|---|---|---|---|---|
| Japan | 1950 | 100 | 25.6 (60) | 7.6 (18) | 9.2 (22) | 42.4 (100) |
| Fed. of Malaya (incl. Singapore) | 1947 | 100 | 17.9 (69.0) | 2.3 (8.9) | 5.7 (22.1) | 25.9 (100) |
| India | 1951 | 100 | 6.6 (55) | 2.1 (18) | 3.3 (27) | 12.0 (100) |
| Ceylon | 1953 | 100 | 5.3 (54) | 3.1 (32) | 1.4 (14) | 9.8 (100) |
| Burma | 1953 | 100 | 5.4 (46) | 0.7 (15) | 3.5 (40) | 9.6 (100) |
| Pakistan | 1951 | 100 | 5.2 (66) | 1.0 (13) | 1.7 (21) | 7.9 (100) |

In three of these six countries - India, Ceylon and Burma - the proportion of the urban population living in large cities is lower than that found in most urbanized countries of the world. Thus, for the "highly urbanized countries", this proportion is, on the average, 67 per cent in Africa, 69 in North America, 65 in Central America, 72 in South America, 64 in Asia and 61 in Europe. Federation of Malaya (including Singapore) is the only territory with a high proportion.

With the exception of Ceylon, the total population for all localities of 20,000 to 50,000 inhabitants is greater than the total for localities of 50,000 to 100,000. In other words, the small cities surpass the middle-sized cities while the pattern is more often to the contrary in the highly urbanized countries.

C. Historical trends

An analysis of the trends in urbanization in this region encounters numerous difficulties due largely to the lack of a comparable series of statistics for most of the countries[1].

There are available, for a few countries only, statistics sufficiently reliable and which cover a long enough period to permit the observation of the long-term trend in urbanization. The statistics in the form of urbanization indexes are presented in Table V.

TABLE V. Trends in percentages of the population living in localities of 20,000 or more and in localities of 100,000 or more, for four ECAFE countries

| | Ceylon | | India | | Japan | | Malaya, Fed. of | |
|---|---|---|---|---|---|---|---|---|
| | 20,000 or more | 100,000 or more | 20,000 or more | 100,000 or more | 20,000 or more | 100,000 or more | 20,000 or more | 100,000 or more |
| Around 1870 | 7.4 | | | | | | | |
| 1880 | 7.4 | 4.0 | 3.9 | 1.6 | | | | |
| 1890 | 7.4 | 4.2 | 4.2 | 1.9 | | | | |
| 1900 | 7.9 | 4.3 | 4.4 | 2.0 | 13.3 | | | |
| 1910 | 8.5 | 5.1 | 4.4 | 2.0 | 18.0 | | 8.3 | 4.3 |
| 1920 | 9.6 | 5.4 | 5.1 | 2.4 | 23.2 | 12.2 | 10.1 | 4.2 |
| 1925 | | | | | 27.8 | | | |
| 1930 | 9.4 | 5.4 | 6.3 | 2.7 | 32.0 | 18.0 | 12.2 | 6.9 |
| 1935 | | | | | 36.8 | | | |
| 1940 | | | 8.2 | 4.1 | 42.0 | 29.4 | | |
| 1947 | 11.4[a] | 11.4[c] | | | | | 17.0 | 7.4 |
| 1950 | 9.8[b] | 5.3[b] | 12.0[c] | 5.6[c] | 42.4 | 25.6 | | |

a/ 1946. b/ 1953. c/ 1951.

1/ For Burma, for instance, there is chronological series of urbanization indexes for the period 1881-1953. According to this series, there appears to have been a significant decline in urbanization between 1891 and 1931. But, in fact, it was the addition during this period of territories without large cities that caused a statistical decrease rather than a genuine decline in the phenomena.

The trend in urbanization for these countries is shown in Figure (1) where the percentages of the populations living in localities of 20,000 and more inhabitants are plotted for the period under consideration in Table V. The world trend in urbanization and the trend in the United States for the period 1800 to 1950 are also presented in this Graph[1]. A more systematic study of urbanization throughout the world reveals that this phenomenon follows, on the whole, a pattern which is almost identical with that found for the United States over the one hundred and fifty years. It seems that during this relatively short period the United States has actually passed through each of the different stages of the urbanization process which may be observed in most of the countries of the world. Beginning with a very low level in 1800, the United States is now among the most urbanized countries of the world[2].

Most of the developed countries have reached an advanced stage of this process; urbanization continues at a pace that is less and less rapid. The under developed countries[3] are, in general, either in the first stage of this process,

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1/ The curve for the United States relates to the percentage of the population living in localities of 25,000 and more inhabitants and the curve for the world is based on the proportion in places of 20,000 and more inhabitants (according to estimates provided by Kingsley Davis).

2/ The S-shaped curve, in semi-logarithmic coordinates, corresponds to a logistic function; such a function corresponds to a rate of growth that is first accelerating then diminishing. It is divided roughly into five phases: 1) the rate of growth of the urbanization index is continually increasing; 2) the rate of growth is maintained at a high level (exponential function); 3) the rate of growth decreases progressively (linear function); 4) the rate of growth is nil (a constant function); 5) the rate of growth is slightly decreasing (a decreasing function). The last phase is still rather problematic and has been observed over a sufficiently long period only in England and Wales. Moreover, it is understood that timing of the different phases varies according to country.

3/ With the exception of certain Latin American countries that are both urbanized and under-developed.

experiencing an accelerating urban growth rate or in a slightly more advanced phase where this rate is beginning to decline.

The recent trend in urbanization in India is particularly characteristic in this respect, especially when compared with that observed for the United States a century ago. Between 1910 and 1950, not only has the urbanization index grown, but the rate of its growth was increased[1/]. Following is the increase in the percentage of the urban population during the last four decades.

India - Relative increase in the percentage of the urban population

(20,000 and more)

| | |
|---|---|
| 1910 - 1920 | 15.9% |
| 1920 - 1930 | 23.5% |
| 1930 - 1940 | 30.2% |
| 1940 - 1950 | 46.3% |

This period of accelerating urban growth is comparable to the first phase experienced by the United States. In fact, the urbanization index was multiplied exactly 2.7 times between 1910 and 1950 in India and between 1810 and 1850 in the United States.

The preceding graph (Fig. 1) shows that in Malaya, between 1910 and 1947, the trend in urban growth followed an exponential function, i.e., with a rather constant rate of increase. The average annual increase in the urbanization index was actually 2.2 per cent between 1910 and 1920, 2.1 per cent between 1920 and 1930 and 2.3 per cent between 1930 and 1947.

An extremely rapid process of urbanization which took place in Japan during the industrialization of the country - since the end of the nineteenth century - was interrupted only by the last war, after the country had attained a level of urbanization comparable with that of the United States.

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1/ This trend corresponds perfectly to the first phase of the scheme that was previously described. See footnote 2/, p. 12.

In Ceylon, urbanization is assuming a less rapid pace. There was even a slight decrease in the proportion of the urban population between 1946 and 1953, due to a decline in the migration from the countryside to the major urban centres, particularly Colombo[1/]

Inasmuch as there is a variety of definitions of administrative subdivisions and many changes have taken place from one census to the next, it is difficult to observe and compare the trends in urbanization according to size of locality in ECAFE countries. Only a few countries have the data necessary for such an observation. Table VI presents for the Federation of Malaya, Japan and India indexes of population growth for various sized localities having at least 10,000 inhabitants, during the last decades.

It is found that in Japan and in India the larger the locality, the greater the population increase. The stability observed in the indexes for cities of 100,000 and more inhabitants between 1940 and 1950 is probably due to the effects of the last war. In fact, there was an average annual decline in population of 2.3 per cent in Tokyo and 5.0 per cent in Osaka during this decade. Among the very large cities of India, the average annual increase in population between 1941 and 1951 was 6.2 per cent in Bombay, 2.8 in Calcutta, 3.6 in Kanpur and 4.1 per cent in Indore, while the average annual increase for the total population of India was only 1.49 per cent for the same period.

As for Malaya it may be observed that between 1920 and 1947, the growth of the small towns (20,000 to 50,000 inhabitants) was greater than that of large cities (100,000 and more inhabitants). Kuala Lumpur and Penang (Georgetown), the two largest cities in Malaya had, respectively, an average annual rate of increase of 2.8 and 1.5 per cent between 1931 and 1947, while the rate for the total population of Malaya was 1.8 per cent.

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1/ See Ceylon, Department of Census and Statistics. Demographic study of the City of Colombo. Monograph No. 2 (Colombo, 1954).

TABLE VI. Index of population growth according to the size of localities

| | | Total population | Size of locality | | | | |
|---|---|---|---|---|---|---|---|
| | | | 100,000 and more | 50,000 to 99,999 | 20,000 to 49,999 | 10,000 to 19,999 | 20,000 and more |
| Japan | 1920 | 100 | 100 | 100 | 100 | 100 | 100 |
| | 1930 | 115 | 170 | 212 | 115 | 113 | 138 |
| | 1940 | 131 | 315 | 185 | 133 | 126 | 181 |
| | 1950 | 150 | 316 | 307 | 190 | 199 | 183 |
| India | 1921 | 100 | 100 | 100 | 100 | a/ | 100 |
| | 1931 | 110 | 127 | 139 | 144 | a/ | 138 |
| | 1941 | 126 | 218 | 194 | 178 | a/ | 204 |
| | 1951 | 141 | 322 | 236 | 219 | a/ | 276 |
| Fed. of Malaya | 1921 | 100 | 100 | - | 100 | 100 | 100 |
| | 1931 | 131 | 211 | - | 173 | 90 | 160 |
| | 1947 | 169 | 296 | - | 379 | 80 | 287 |

a/ Data not available.

In Korea for the period 1940-49 the rate of growth of large cities exceeded that for the country as a whole: 4.8 per cent in Seoul, 6.1 in Pusan and 6.9 in Taegu. Between 1939 and 1948, there was an average annual increase of 5.1 per cent in Manila as compared with 1.9 per cent for the Philippines. In Ceylon, however, the average annual increase for the total population was greater than that of the chief metropolis, Colombo, the figures being 2.8 and 2.3 per cent, respectively, for the period 1946-53.

Some aspects of city growth have been discussed in a fairly recent study on urbanization in the ECAFE region. According to this report "in certain ECAFE countries, the proportion of the total population living in such cities undoubtedly exaggerates the extent to which urbanization has proceeded. For example, in Malaya, Indonesia, Thailand, Burma and Indochina, recent or earlier

records show that substantial proportions of the inhabitants of large cities are aliens. Moreover, many of these cities tend to be economically 'alien' to the countries in which they are located, since their activities and commerce tend to be transacted more with alien people and on world markets rather than with the indigenous people"[1/].

1/ Aspects of urbanization in ECAFE countries. Economic Bulletin for Asia and the Far East, Vol. IV, No. 1, p. 4. Economic Commission for Asia and the Far East. United Nations. Bangkok, May 1953.

## Part II - Characteristics of urban population

Included in this section are discussions of the demographic traits of urban and rural or city and non-city populations of ECAFE countries. The age-sex distribution, mortality and fertility of these groups were investigated, within the limitations of the data. Even for the Western countries, for which there are reliable statistics, the study of the demographic aspects of urbanization is hampered by the lack of adequate data. For this reason it has been necessary to use, quite often, indirect means of describing and analysing the characteristics of the urban population[1/].

### A. Age-sex distribution

#### 1. The sex ratio

Except for Japan and Korea, the ratio of males to females is on the whole higher in the ECAFE area than in most Western countries.

Along with the tendency towards generally high national sex-ratios, the region is distinguished (like Africa and parts of Central Europe) by a disproportionate number of males in urban areas. The number of males per 100 females is shown for urban and rural areas of 11 ECAFE countries at specified census dates in Table (A). The 1950 urbanization index[2/] and the excess of the rural over the urban sex ratio are also shown. The amount of the urban excess varies from -4 in Singapore, an island dominated from the demographic point of view by its chief city, to 25 in Pakistan. However, such a comparison as this is of doubtful value, since the definition of what is urban varies markedly according to country; in Japan it relates to localities of 30,000 and more inhabitants and in Brunei the urban area referred to in this text consists of two towns of between 10,000 and 13,000 inhabitants each.

Table (B) presents the sex-ratio in 12 countries and their chief cities or the combined ratio for all cities of 100,000 and more inhabitants. These statistics also show that males predominate in the large cities. The differential exists even in the small towns of North Borneo, Sarawak and Brunei.

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1/ The tables designated alphabetically will be found in the appendix.

2/ The percentage of the population of the country that resides in places of 20,000 and more inhabitants.

Another interesting and significant feature of a number of countries of the region is the pattern of the sex-ratio according to size of locality within the country. Data on this subject for seven ECAFE countries are given in Table (C); figures for the Netherlands are also included for comparative purposes. It is found that, except for Thailand, the population of the Asian countries tends to become more masculine as the size of locality increases. In the Netherlands, as in the majority of Western industrial countries, the pattern is reversed. There is apparently an almost equal distribution of the sexes throughout Thailand; the observed differences in the four classes of localities shown are slight and irregular.

The tendency for the population to become more masculine as localities become more urban reflects, primarily, the sex composition of migrants from rural areas and villages to towns and cities, although in some cases relatively high mortality of females in urban areas may also be a factor. Rural-urban migration in the Asian countries is primarily a movement of males. In many of the countries of south-east Asia, tradition does not sanction the employment of women outside the home. Thus, while the volume of rural-urban migration is largely dependent on the economic situation, the demographic characteristics of the migrants are conditioned mainly by long established societal patterns[1/].

Considerable differences in the sex ratio in localities of different sizes are shown by the census data for Pakistan. According to these statistics, there are 123 males per 100 females in towns of 10,000 to 19,999, 149 per 100 in cities of 50,000 to 99,999, and 136 males per 100 females in cities of 100,000 and more inhabitants. The International Labour Office reports that only about 6 per cent of persons in the labour force in Pakistan are female (although it is pointed out that such statistics are of questionable quality owing to problems of classification and definitions)[2/].

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1/ United Nations. Economic Bulletin for Asia and the Far East. "Aspects of Urbanization in ECAFE countries". Vol. IV, No. 1. (May, 1953). p. 8, and "The world's working population: some demographic aspects". International Labour Review. pp. 155-57, 173-76.

2/ ILO "The world's working population ...". p. 174.
Mohammad Yusuf, "Population of Pakistan and its Characteristics"; paper presented at the World Population Conference, Rome (1954) UN Document No. E/Conf.13/370, pp. 16-17.

The pattern of the sex ratio according to size of locality in Japan and Thailand suggest that in those countries the migration of women is somewhat more important than in some of the other countries of the region. In Japan there was an average of 95 males per 100 females in all localities of between 10,000 and 100,000 inhabitants and 99 males per 100 females in the great metropolitan cities (100,000 or more inhabitants). Although statistics of female participation in the labour force are known to be particularly erratic, they suggest that women in Japan and Thailand have a much higher rate of gainful employment than is generally found in the ECAFE area[1], and this may be the reason why they are more migrant. However, the pattern of the sex ratio in cities and towns of Japan is of such that it requires some explanation in addition to the sex-composition of rural-urban migrants. It has been stated that in Japan the sex ratio in a given city may be related to the type of employment found there. According to the report,

> "... the populations were more predominantly male in the newer cities /of Japan/ where many industries were concentrated, and were less predominantly male or primarily female in older cities where commercial pursuit or light industries of a household type occupied the majority of the gainful workers. Larger cities tended to have a larger proportion of males than did the smaller cities and towns, although this was primarily a reflection of the differences in types of industrial structure and employment opportunities." [2]

An indication of the full impact of the male migratory movement to major metropolitan areas upon the composition of the population in those cities may be obtained from the age-specific sex ratios. The excess of males over females in urban areas is greatest, in most cases, at ages 15-59 and more particularly at ages 15-39. Table(VII) gives the ratio of males to females for the latter age group and all ages for some ECAFE countries and their chief cities.

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1/ ILO, "The World's Working Population ...". p. 159.

2/ UN, "Aspects of urbanization in the ECAFE countries ...". pp. 8-9.

TABLE VII. Rates of males to females at ages 15-39 and all ages in ECAFE countries and their chief cities

| | | 15 - 39 | all ages |
|---|---|---|---|
| Brunei, | 1947 | 107 | 112 |
| | Belait | 176 | 155 |
| Ceylon, | 1946 | 115 | 113 |
| | Colombo | 222 | 173 |
| Japan, | 1950 | 92 | 96 |
| | Tokyo | 102 | 102 |
| Fed. of Malaya, | 1947 | 105 | 112 |
| | Georgetown | 117 | 113 |
| N. Borneo, | 1951 | 99 | 107 |
| | Sandakan town | 125 | 119 |
| India, | 1951 | 107 a/ | 106 |
| | Bombay | 205 a/ | 165 |
| | Delhi | 148 a/ | 144 |

a/ Ages 15 - 44.

2. Age distribution

In most all countries throughout the world the urban population has a higher proportion of young adults and a lower proportion of children than the rural population. The findings for the seven ECAFE countries for which data are available do not reveal any deviations from this general pattern. Data for these countries and their chief cities or urban areas are shown in Table (D). In addition to having a higher percentage of persons aged 15-39 and a lower proportion of those aged 0-15, cities had, in all cases, a smaller percentage of aged males than the country as a whole. A higher percentage of women aged 60 and over were

enumerated in Georgetown (Malaya) and Seoul (South Korea) than in the country as a whole, but the information for the remaining five countries showed females of this age to be relatively more numerous outside of cities. Thus, on the whole, relatively fewer of the aged are found in the city than outside of it. The percentages of adults aged 40-59 in the whole of the country and in the city do not differ greatly.

If the findings for these countries are an indication of a prevailing pattern in the ECAFE region, it would seem that the city carries a disproportionately small share of the country's youth and aged. The urban working males appear to be far less heavily taxed in this respect than those living outside the cities. Statistics in support of this generalization are presented in Table (E) which contains dependency ratios for ten countries of the ECAFE region and their large cities. Dependency ratios have been computed by relating the number of males under 15 and over 60 to those aged 15-59, the latter group being taken as a rough equivalent of the male labour force potential.

The statistical evidence of a lower burden of dependency in cities than outside of them may be to some extent misleading. The ratios presented show how many male dependents each working man would have, on the average, if all men in the age range taken to represent the working ages were employed and no men of other ages were employed, and if working males supported only persons living in the area where they themselves were enumerated. The first condition is obviously never fully satisfied and it is generally less closely approximated in rural than in city populations. So far as the second assumption is concerned, as previously stated, the age-specific sex-ratios for national and city populations suggest that the majority of rural-urban migrants in the ECAFE region are males of economically productive age-groups. These men leave their villages to seek employment in the cities, and they very often send regular remittances to their families and relatives or save their earnings and return with them to their rural place of origin 1/.

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1/ Kingsley Davis. The Population of India and Pakistan. (Princeton, 1951). p. 136; Bert F. Hozelitz, "The city, the factory, and economic growth". Papers and Proceedings of the sixty-seventh annual meeting of the American Economic Association (December, 1954). p. 179. See also Mohammad Yusuf, Population of Pakistan and its characteristics. Paper presented at the World Population Conference. United Nations Document N°. E/Conf. 13/370.

It follows that in countries where the sex ratio in cities is markedly high, the true urban-rural differertial in the burden of dependency is likely to be over-estimated on this account, as well as on account of the larger proportion of children and aged persons who work in the rural areas, as compared with the cities. Furthermore, it may well be that the cost of support per dependent is higher in the urban than in the rural areas.

B. Mortality

1. General mortality

It is difficult to assess the level of mortality in most countries of the ECAFE region, primarily because of incomplete registration of deaths. An estimate of as much as 50 per cent under-registration has been made for some of the ECAFE countries. The death statistics of only a few ECAFE countries have been evaluated as being fairly complete in coverage and registration 1/. These countries are Ceylon, Hong-Kong, Japan, Malaya, and Singapore. The pre-war statistics for Korea and Taiwan were also believed to be nearly complete. In addition, estimates of mortality in India have been made officially on the basis of census data. It is impossible to obtain a complete picture of the mortality situation or of urban-rural mortality differences in the other ECAFE countries.

An effective measure of mortality is the expectation of life at birth, which is unaffected by the age-sex distribution of the population. This index of mortality is available for Ceylon, India, Japan, Korea, Thailand, and Taiwan. The data are given in Table VIII.

Table VIII. Expectation of life at birth and at age 15 for males and females in six ECAFE countries.

| Country and date | Expectation of life at birth | | Expectation of life at age 15 | |
|---|---|---|---|---|
| | Males | Females | Males | Females |
| Japan, 1953 | 61.9 | 65.7 | 52.6 | 56.0 |
| Ceylon, 1952 | 57.6 | 55.5 | 54.1 | 51.6 |
| Thailand, 1947-48 | 48.69 | 51.90 | 43.81 | 46.80 |
| Korea, 1938 | 47.20 | 50.59 | 45.68 | 48.95 |
| Taiwan, 1935-40 | 41.08 | 45.73 | 41.23 | 46.44 |
| India, 1941-51 | 32.45 | 31.66 | 36.24 | 36.56 |

1/ United Nations. Demographic Yearbook, 1955. p. 28 and table 25.

Males and females in Japan in 1953 have a significantly longer expectation of life at birth than those in the other ECAFE countries - about twice as long as the population of India during the period 1941-51. The life expectancy data for Thailand being based on statistics of uncertain completeness, may exaggerate the length of life in that country.

Comprehensive data on the urban-rural differential in expectation of life are available only for Japan, which is far from representative of the region as a whole. An analysis of life table data for this country for the years 1926-30 to 1949 disclosed that during the period 1926-30 mortality in cities was considerably higher than in rural areas, particularly among children and young adults, but that in recent years the differences have been narrowing 1/. In addition, limited data are available for Ceylon. According to the 1945-47 mortality experience in Ceylon, the expectation of life at birth was much lower in Colombo Municipality than elsewhere in the country. For the whole country the life expectation at birth was 47.2 years for males and 42.5 years for females as compared with 38.6 years and 34.4 years for males and females, respectively, in Colombo Municipality 2/.

2. Infant mortality

Infant mortality rates -- that is, numbers of deaths of children under one year of age in the course of a year per 1,000 births during the same period -- are affected even more than general mortality measures by the deficiencies of vital statistics in most ECAFE countries. Not only the failure to register some of the infant deaths, but also incomplete birth registration may falsify these rates, and if the omissions of birth registration are proportionately greater than those of infant death registration, even grossly incomplete statistics will yield an exaggerated infant mortality rate. The comparison of infant death rates for urban and rural areas is further affected by the practise, in some countries, of tabulating the statistics by the place where the infant death or birth occurred, rather than the place of residence. The difference is important because many births and infant deaths pertaining to rural residences occur in

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1/ United Nations, Economic Commission for Asia and the Far East. "Aspects of Urbanization in ECAFE countries". Economic Bulletin for Asia and the Far East. Vol. IV. N°. 1. p. 12.

2/ Ibid., p. 12.

hospitals located in urban centres. Registered infant mortality rates for those countries for which the data have been officially evaluated as being nearly complete are as follows :

| | Infant deaths per 1,000 live births | | | | |
|---|---|---|---|---|---|
| | 1950 | 1951 | 1952 | 1953 | 1954 |
| Ceylon | 81.6 | 81.9 | 78.4 | 71.2 | 72.0 |
| Hong-Kong | 99.6 | 91.8 | 77.1 | 73.6 | 72.4 |
| Japan | 60.1 | 57.5 | 49.4 | 48.9 | ---- |
| Malaya | 101.6 | 97.3 | 90.0 | 83.4 | 83.1 |
| Singapore | 82.2 | 74.9 | 69.8 | 66.9 | 56.0 |

These countries, however, are by no means typical of the ECAFE region; in general, their infant mortality rates can be presumed to be considerably lower than those of the region as a whole.

The data required for an analysis of urban-rural differences (or similarities) in infant mortality are very sparse. The World Health Organization gives the national rate and the rate for at least one large city in each of 5 countries in the region 1/. A comparison of the city and national rates is presented in the following table.

1/ World Health Organization. Annual Epidemiological and Vital Statistics, 1950.

TABLE IX. Registered deaths of children under 1 year of age per 1,000 registered live births in certain ECAFE countries and their large cities, 1950.

| Country and City | Registered Deaths of children 0 - 1 per 1,000 registered live births |
|---|---|
| Japan | 60 |
| Osaka | 50 |
| Tokyo | 42 |
| Philippines | 102 |
| Manila | 72 |
| India | 127 |
| Bombay | 152 |
| Ceylon | 82 |
| Colombo | 112 |
| Thailand | 62 |
| Bangkok | 67 |

In Japan, the infant death rate is lower in the cities listed than in the total country. In Ceylon, the infant mortality rate is higher outside of the principal city. The data for the Philippines follow the Japanese pattern and those for India and Thailand the Ceylonese pattern of urban-rural difference, but the quality of registration in these cases is uncertain. It is not possible to formulate any general conclusions for the region on the basis of these statistics.

The question arises as to why the rates for cities in some cases exceed the national level. First, there is the possibility of greater under-registration of infant deaths in rural than in urban areas, or greater under-registration of births in the cities, or both. Second, where the data are tabulated by place of occurrence, the proportion of deaths of rural infants occurring in city hospitals may exceed the proportion of births to rural residents occurring there.

Third, there is a tendency in some countries for women to go to their mothers for their period of confinement. This more often means travelling from the town or city to a rural area than vice versa. The birth is thus recorded in the rural area and the subsequent death - if it occurs - may be recorded in the city. On the other hand, it is entirely possible that in some or all of these cases infant mortality in the city actually exceeds the national level. This was true during the early stages of urbanization in a number of European countries and the United States. It may be recalled, for instance, that in Sweden, the infant mortality rate in towns was considerably higher than in the rural districts during the nineteenth century. It is only since the 1920's that the rural rates have exceeded rates for the towns.

There has been an appreciable decline in the level of (recorded) infant mortality over the past 15-25 years in countries for which data are available. An analysis of trends based on such faulty statistics as those reported by a number of the countries in this region is indeed very hazardous, but even when allowances are made for continuous improvements in the registration of infant deaths as well as for a steadily increasing number of births and improvements in their registration, a clear tendency towards declining infant mortality may be observed for most of these countries. The most marked declines seem to have occurred in Singapore and Japan.

In the four countries for which statistics required for a comparison of urban and rural trends are available (without regard to reliability), it is only in Ceylon that the decline in infant mortality has been less marked in the large metropolis than in the country as a whole. (Table F.) The infant death rate of 113 per thousand births in Osaka (Japan) for the period 1936-38 seems to have been about average for the country. Tokyo recorded a rate of 92 per thousand live births. During the period under consideration the decrease was more pronounced in Osaka than in Tokyo and less marked in the whole of Japan than in either city. Between 1936-38 and 1948, an increase was recorded in Calcutta, but the rate dropped in 1949. A decline was apparently underway throughout the period of observation in Bombay and elsewhere in India. However, it should be emphasized again that the Indian data are seriously defective. The same qualification applies with less force to the data for Thailand.

The recorded rates appear to be too low for Bangkok and particularly for Thailand as a whole. The registered rates for both Thailand and Bangkok have shown a marked decline since 1936-38. In Bangkok the decrease was from 153 in 1936-38 to 67 in 1950, and in Thailand as a whole the registered rate has fallen from 96 at the beginning of the period to 62 in 1950. While it is very likely that both Bangkok and less urban areas of Thailand have experienced a decline in infant mortality, the extent of under-registration of vital statistics appears to be such that neither the true magnitude of the decreases nor the trend in the urban-rural differential can be determined from the data now available.

There is ample evidence from the available statistics of a continuing decline in infant mortality in countries of the ECAFE region. However, the sparse information on the trend in the urban-rural differential does not disclose a uniform pattern in the four countries for which we have data.

C. Fertility

Birth registration, like death registration, is known to be incomplete in many of the ECAFE countries, and it is probably less efficient in rural than in urban areas within these countries. This is one of the reasons why it is difficult to carry out a meaningful analysis of the urban-rural fertility differential and trend on the basis of crude birth rates. Sex and age differences between urban and rural populations and the problem of nonresident births make a comparison of crude rates for these areas a somewhat hazardous undertaking even where the data are reliable.

The child-woman ratio (children 0-4 per 1,000 women of child-bearing age) is generally a better approach to the measurement of fertility in this region. The statistics are taken from census enumerations, so that the problem of treatment of nonresidents does not arise, and the proportion of women in the child-bearing age group does not affect the measure. It may therefore be employed as a means of making comparisons between levels of fertility of populations having differing age structures. However, a few problems arise when inter-area comparisons are based on the child-woman ratio. The ratio reflects not only fertility but also child mortality, and there are national as well as urban-rural differences in

the mortality of children under 5 years of age. Furthermore, there is a general tendency of under-enumeration of these children in the census, and the extent of the error varies from one country to the next and according to urban and rural residence within a country. Another important consideration is the urban-rural and national differences in mortality rates among women in the child-bearing ages.

An examination of the child-woman ratios shows that effective fertility (that is, the net contribution of births less childhood deaths), is quite high in most of the ECAFE countries. The ratios, computed from census taken within the last ten years in fourteen of these countries, ranged from 527 children per 1,000 women in Japan (1950) to 765 for the whole of Korea (1946). The latest available figure for Taiwan (781) relates to the year 1935. For comparative purposes, it may be recalled that the highest ratios recently observed among the industrialized countries are 498 in Canada (1951), 480 in Chile (1940) and 476 in Finland (1950). Taking into consideration the markedly higher child mortality - particularly infant mortality - and the probably greater under-enumeration of children in the ECAFE region (with the exception of Japan), it can be assumed that the gap between the level of fertility in these countries and in the western countries is greater than the figures suggest.

Child-woman ratios for urban and rural areas are not available for many of the countries of this region.

Table XI contains for six of the ECAFE countries, the national child-woman ratio and the ratio for one or two of their large cities.

TABLE XI. Children under 5 per 1,000 women 15-49 in ECAFE countries and their cities

| Country and year of census | Percentage of Population in places of 20,000 and more 1950 | National Child-woman ratio | City | Child-woman ratio |
|---|---|---|---|---|
| Japan, 1950 | 42.1 | 527 | Tokyo | 454 |
| Korea, 1946 | 21.0 | 765 | Seoul, 1947) | 502) |
| | | | Pusan, 1947) | 539) |
| Malaya, Fed. of 1947 | 17.9 | 565 | George Town (Penang) | 557 |
| India, 1951 | 12.0 | 621 a/ | Bombay | 516 a/ |
| Ceylon, 1946 | 11.4 | 543 | Colombo | 467 |
| Burma, 1953 | 10.0 | 559 b/ | Rangoon | 512 |

a/ Children 0-4 per 1,000 women aged 15-49.

b/ Data relates to 60 towns.

With the exception of Malaya where the ratios are very close, the national child-woman ratio is always higher than the city ratio. The former is from 16 per cent (Japan and Ceylon) to 50 per cent (Korea) higher than the latter. In the case of Burma the comparison relates to Rangoon and sixty towns, national data not being available.

Information on the fertility of married couples in urban and rural areas of India is available from the National Sample Survey 1/. The data which are given in the following table, reveal the existence of a rather insignificant urban-rural differential in the total number of children born to women who were married during 1930-39, after specified durations of marriage.

1/ Ajit Das Gupta et al. Couple Fertility. The National Sample Survey. Number 7. (Calcutta, 1955), p. 38. The information was obtained from either husband or wife over a period of six months, April-September 1952. The urban area consists of localities of 5,000 and more inhabitants.

TABLE XII. Total number of children born to women marrying during 1930-39 at ages 15 and over after specified durations of marriage 1/

| Number of years after marriage | Urban | Rural |
|---|---|---|
| 2 | 0.21 | 0.20 |
| 7 | 1.82 | 1.70 |
| 12 | 3.32 | 3.12 |

It may be observed that, although the differences are very slight, urban wives in the 1930-39 marriage cohort reported more children after each of the durations shown than had rural women in the same cohort. These data relate to fertility over a period of roughly twenty years, during the 1930's and 1940's.

Data on urban and rural fertility in one region of India are also available from a population survey of Mysore State, in which the numbers of births were ascertained for a 2-month period in 1951-52 2/. The number of births per 1,000 presently married women aged 15-44 was found to be much lower in Bangalore City than in the towns or rural zones of Mysore State. The statistics are provided in the following table.

1/ Ajit Das Gupta et al. Couple Fertility. The National Sample Survey. Number 7. (Calcutta, 1955), p. 38. The information was obtained from either husband or wife over a period of six months, April-September 1952. The urban area consists of localities of 5,000 and more inhabitants.

2/ Data were taken from a report now being prepared by the United Nations Secretariat.

TABLE XIII. Birth rates per 1,000 married women aged 15-44 in Bangalore City, Towns and Rural Zones of Mysore State, India, 1951-1952

| Rural Zones | Number of births per 1,000 married women 15-44 |
|---|---|
| I. Rural hills with anti-malarial operations | 273 |
| II. Rural hills without anti-malarial operations | 257 |
| III. Rural plains | 238 |
| Towns of 1,000 to 25,000 inhabitants | 252 |
| Bangalore City | 199 |

These data show an important difference between the level of the birth rate in the very large city and in the small towns and rural areas. The birth rate in both the rural zones of Mysore State and the towns of 10,000 to 25,000 inhabitants, was found to be substantialy higher than in Bangalore City.

Additional evidence on the fertility differential in another region of India is available from a study of fertility trends in West Bengal [1] where total fertility was found to be lower in Calcutta than in the surrounding rural areas of West Bengal.

The rates, which had been corrected for the under-registration of births and for infant mortality, showed that for the period 1941-50, there was an average of 198 live births per 1,000 married women aged 15-50 in West Bengal compared with 134 in Calcutta. The differential would probably have been greater if certain towns had not been included in the rural area.

The data for Mysore and West Bengal and those for all India provided by the National Sample Survey are not comparable either with respect to time reference or to

1/ A. Gosh, "A Study of Demographic Trends in West Bengal during 1901-1950". Population Studies. Vol. IX, N°.3 (March 1956), p. 235.

the type of fertility measure employed, and the interpretation of the findings is uncertain. On the one hand, they may be taken to suggest that the level of fertility in certain large cities is lower than that in rural areas, but that the same relationship does not hold for all urban areas as compared with rural areas. On the other hand, they may be interpreted as implying that a situation of relatively low fertility in urban areas, which did not exist previously, has recently been developing.

Unfortunately, the statistics required for an investigation of the relationship between the level of fertility and size of localities in other ECAFE countries are very limited. Relatively recent reliable and comprehensive data are available for only Japan; certain data have been compiled also for Ceylon and although these data provide useful information, they are hardly sufficient to allow any inferences as to the general pattern in the ECAFE region.

The following table gives crude and standardized rates for the year 1935 in Japan. Although each series shows birth rates to decline consistently as size of locality increases, the relationship is more pronounced in the series of rates standardized for age.

TABLE XIV. Births per 1,000 Population in Japan, 1935

| Size of locality | Crude rates | Standardized rates |
|---|---|---|
| Japan | 31.67 | 31.12 |
| Localities of : | | |
| 100,000 and more | 26.32 | 22.57 |
| 50,000 - 100,000 | 27.78 | 24.68 |
| 40,000 - 50,000 | 28.55 | 25.18 |
| 30,000 - 40,000 | 28.67 | 26.16 |
| 20,000 - 30,000 | 30.46 | 28.87 |
| 10,000 - 20,000 | 32.04 | 31.34 |
| 5,000 - 10,000 | 34.41 | 35.99 |
| 5,000 + | 34.93 | 38.16 |

Source : Minoru Tachi and Masao Uyeda. "A Statistical Study on the Variation of Basic Demographic Phenomena by Size of Communities". Archives of the Population Association of Japan. N°.1 (1952), pp. 107, 110.

The numbers of children ever born per 1,000 married women 45 to 49 years of age in rural Ceylon, Galle Municipality (the second largest municipality in Ceylon) and Colombo in 1946 were found increased in that order (see Table XV.)

TABLE XV. Ceylon - Children ever born per 1,000 ever married women 45-49 years of age, 1946

| | Colombo Municipality | Galle Municipality | Rural Ceylon |
|---|---|---|---|
| Ratios | 352 | 414 | 498 |
| Index | 100 | 118 | 141 |

However, this classification excludes a significant portion of Ceylon, the most important of which is the towns. It cannot be concluded, therefore, that the inverse relationship between fertility and size of locality observed for these three areas existed throughout Ceylon, although the information available is indicative.

The general trend in the fertility differential in the ECAFE region cannot be determined from information now available. Relevant data exist for only Japan, Ceylon and West Bengale, and no inferences as to the regional situation can be drawn from the findings for these few areas.

Crude birth rates per 1,000 population in large cities and rural areas of Japan are presented below for the years 1925, 1935 and 1947.

| | 1925 | 1935 | 1947 |
|---|---|---|---|
| Localities of 100,000 and more | 28.84 | 26.32 | 32.03 |
| Localities of less than 5,000 | 35.46 | 34.93 | 34.77 |

It may be seen from these figures that between 1925 and 1935, the decline was almost the same for large cities and rural areas. Between 1935 and 1947, the rural birth rate remained constant while a significant increase occurred in large cities. In Japan, as in many industrialized countries, the post-war "baby-boom" was, in

large part, an increase in urban fertility. Total fertility rates (based on adjusted birth data) for Calcutta and the rest of West Bengal [1] indicate a decline in both areas over the period 1901-50. However, the differential is seen to have fluctuated considerably; declining during 1901-30, increasing between 1930 and 1940 and remaining rather steady over the last decade. (See Table XVI).

TABLE XVI. Adjusted Births per 1,000 Married Women Aged 15-50 in West Bengal, India

| Year | Rural Districts | Calcutta | Ratio of Urban to Rural |
|---|---|---|---|
| 1901-10 | 264 | 178 | 67 |
| 1911-20 | 239 | 198 | 83 |
| 1921-30 | 209 | 176 | 84 |
| 1931-40 | 218 | 147 | 67 |
| 1941-50 | 198 | 134 | 67 |

In Ceylon, the difference between the ratios of children under 5 per 1,000 women 15 to 44 shown by the censuses from 1901 to 1921 for Colombo Municipality and the remainder of the country remained virtually constant during this period. However, returns from the 1946 census revealed a substantial increase in the child-woman ratio in Colombo, so that the ratio for this city in 1946 exceeded that for the remainder of the country. It is suggested that the change was due largely to a marked decline in infant mortality rather than a large increase in fertility in Colombo.

1/ A. Ghosh. "A Study of Demographic Trends in West Bengal during 1901-1950". Population Studies, Vol. IX, N°.3 (March, 1956). p. 235.

## APPENDIX

TABLE A. Ratio of males to females in urban and rural areas of ECAFE countries at the latest census and urbanization index in 1950

| Country | Year | Males per 100 females | | Per cent of total population in places of 20,000 and more |
|---|---|---|---|---|
| | | urban | rural | |
| Singapore | 1947 | 121 | 125 | 72.3 |
| Japan | 1950 | 97 | 96 | 42.1 |
| Korea | 1945 | 104 | 102 | 21.0 |
| South Korea | 1949 | 105 | 102 | 18.6 |
| Malaya, Fed. of | 1947 | 118 | 110 | 17.0 |
| India | 1951 | 116 | 104 | 12.0 |
| Ceylon | 1946 | 128 | 104 | 11.4 |
| Pakistan 1/ | 1951 | 133 2/ | 108 | 7.8 |
| Thailand | 1947 | 107 | 99 | 7.7 |
| Sarawak | 1947 | 115 | 105 | 7.0 |
| Brunei 3/ | 1947 | 120 | 103 | 0.0 |
| North Borneo | 1951 | 128 | 104 | 0.0 |

1/ Source : Mohammad, Yusuf. "The Population of Pakistan and its characteristics". World Population Conference Paper, E/CONF. 13/370, p. 17.

2/ Population in places of 5,000 and more.

3/ Urban relates to two towns : 1) 10,619; 2) 12,561.

TABLE B. Ratio of males to females in selected countries and their cities of 100,000 and more, or capital cities

| Country – locality | Census Year | Males per 100 females |
|---|---|---|
| Singapore | 1947 | 122 |
| Singapore City | | 122 |
| Japan | 1950 | 96 |
| Cities of 100,000 + | | 99 |
| South Korea | 1949 | 102 |
| Seoul | 1947 | 108 |
| India | 1951 | 106 |
| Cities of 100,000 + | | 127 |
| Ceylon | 1946 | 113 |
| Colombo (362,074) | | 139 |
| Burma | 1953 | 104 |
| Cities of 100,000 + | | 111 |
| Pakistan 1/ | 1951 | 113 |
| Karachi 1/ (1,068,000) | | 135 |
| Thailand | 1947 | 100 |
| Cities of 100,000 + | | 101 |
| Sarawak | 1947 | 106 |
| Kuching Municipality (37,954) | | 109 |
| North Borneo | 1951 | 107 |
| Sandakan Town (14,499) | | 119 |
| Brunei | 1947 | 112 |
| Belait (12,567) | | 155 |

1/ Mohammad Yusuf, "Population of Pakistan and its characteristics" ...

TABLE C. Ratio of males to females in localities of specified size at latest census

| Country | Census Year | Total Country | Localities having a population of | | | |
|---|---|---|---|---|---|---|
| | | | 100,000 + | 50,000 - 99,999 | 20,000 - 49,999 | 10,000 - 19,999 |
| Burma | 1953 | 104 | 111 | 96 | 105 | 100 |
| Ceylon | 1946 | 113 | 139 | 119 | 130 | 122 |
| India | 1951 | 106 | 127 | 114 | 112 | 106 |
| Japan | 1950 | 96 | 99 | 95 | 95 | 95 |
| Pakistan | 1951 | 133 | 136 | 149 | 131 1/ | 123 2/ |
| Philippines | 1948 | 101 | 103 | 102 | 100 | 100 |
| Thailand | 1947 | 100 | 101 | 99 | 100 | 101 |
| Netherlands | 1946 | 99 | 94 | 96 | 97 | 101 |

1/ 25,000 - 49,000

2/ 10,000 - 24,999

TABLE D. Distribution of the population by sex and broad age groups for specified countries and their large cities

| | | Census Year | Total | Under 15 | 15-39 | 40-59 | 60 + |
|---|---|---|---|---|---|---|---|
| JAPAN | M. | 1950 | 100.0 | 36.6 | 38.5 | 17.9 | 7.0 |
| | F. | | 100.0 | 34.2 | 40.2 | 17.2 | 8.4 |
| Tokyo | M. | | 100.0 | 31.9 | 44.7 | 18.6 | 4.8 |
| | F. | | 100.0 | 31.4 | 44.9 | 17.7 | 6.0 |
| CEYLON | M. | 1946 | 100.0 | 35.8 | 42.7 | 16.0 | 5.5 |
| | F. | | 100.0 | 38.9 | 42.0 | 13.9 | 5.2 |
| Colombo | M. | | 100.0 | 20.9 | 59.1 | 16.6 | 3.4 |
| | F. | | 100.0 | 34.2 | 46.2 | 14.6 | 5.0 |
| MALAYA, Fed. of | M. | 1947 | 100.0 | 38.6 | 36.8 | 19.4 | 5.2 |
| | F. | | 100.0 | 41.3 | 39.3 | 14.5 | 4.8 |
| George Town | M. | | 100.0 | 33.5 | 42.9 | 20.0 | 3.6 |
| | | | 100.0 | 37.4 | 41.5 | 16.0 | 5.1 |
| SOUTH KOREA | M. | 1949 | 100.0 | 41.9 | 38.2 | 14.9 | 4.8 |
| | F. | | 100.0 | 41.3 | 37.6 | 15.0 | 5.9 |
| Seoul | M. | 1947 | 100.0 | 34.4 | 49.6 | 12.4 | 3.6 |
| | | | 100.0 | 33.2 | 45.8 | 14.2 | 6.8 |
| INDIA | M. | 1951 | 100.0 | 25.7 1/ | 52.2 2/ | 16.7 | 5.4 |
| | F. | | 100.0 | 26.5 1/ | 51.8 2/ | 15.8 | 5.9 |
| Total Urban | M | | 100.0 | 34.5 1/ | 50.0 2/ | 13.0 | 2.5 |
| | F | | 100.0 | 37.8 1/ | 46.5 2/ | 12.7 | 3.0 |
| BURMA | M | 1954 | 100.0 | 36.7 | 42.4 | 15.9 | 5.0 |
| | | | 100.0 | 38.2 | 41.5 | 15.1 | 5.2 |
| Rangoon 3/ 4/ | M | 1950 | 100.0 | 32.0 | 47.4 | 17.4 | 3.2 |
| | F | | 100.0 | 33.3 | 47.8 | 15.5 | 3.4 |
| SARAWAK | M | 1947 | 100.0 | 39.5 | 37.3 | 18.0 | 5.2 |
| | F | | 100.0 | 39.6 | 40.7 | 14.7 | 5.0 |
| Kuching Municipal | M | | 100.0 | 37.4 | 40.5 | 17.2 | 4.9 |
| | F | | 100.0 | 40.4 | 41.6 | 13.0 | 5.0 |

1/ Under 10.

2/ 10-39.

3/ Age groups: under 16, 16-40, 41-60, over 60.

4/ Random sample.

TABLE E. Ratio of the dependent male population to the male potential labor force (males under 15 and over 60 per 100 males aged 15-59)

| Country, city and census year | Population in places of 20,000 and more (1950) | Ratio of dependent males to males aged 15-59 | City x 100 / National |
|---|---|---|---|
| Singapore, 1947 | 72.3 | 58 | 50 |
| Singapore City | | 29 | |
| Japan, 1950 | 42.1 | 77 | 75 |
| Tokyo | | 58 | |
| South Korea, 1949 | 18.6 | 88 | 69 |
| Seoul, 1947 | | 61 | |
| Malaya, Fed. of, 1947 | 17.9 | 78 | 76 |
| George Town (Penang) | | 59 | |
| India, 1951 | 12.0 | 68[1/] | 47 |
| Bombay | | 32[1/] | |
| Ceylon, 1946 | 11.4 | 70 | 46 |
| Colombo | | 32 | |
| Burma, 1954 | 10.0 | 71 | 76 |
| Rangoon, 1950 | | 54 | |
| Sarawak, 1947 | 7.0 | 81 | 90 |
| Kuching Municipal Dist. | | 73 | |
| North Borneo, 1951 | 0.0 | 77 | 86 |
| Sandakan Town | | 66 | |
| Brunei, 1947 | 0.0 | 76 | 63 |
| Belait | | 48 | |

1/ 15-44.

TABLE F. Indexes of infant mortality in five countries and their chief cities

| | | Total Country | Colombo | |
|---|---|---|---|---|
| Ceylon | 1931-35 | 100 | 100 | |
| | 1936-38 | 89 | 93 | |
| | 1946 | 77 | 69 | |
| | 1947 | 55 | 73 | |
| | 1948 | 51 | 66 | |
| | 1949 | 48 | 62 | |
| | 1950 | 45 | 63 | |
| | | Total | Bombay | Calcutta |
| India | 1936-38 | 100 | 100 | 100 |
| | 1946 | 83 | 77 | 103 |
| | 1947 | 87 | 66 | 114 |
| | 1948 | 80 | 65 | 110 |
| | 1949 | 75 | 69 | 70 |
| | 1950 | 78 | 60 | — |
| | | Total | Osaka | Tokyo |
| Japan | 1936-38 | 100 | 100 | 100 |
| | 1946 | — | 46 | — |
| | 1947 | 68 | 70 | — |
| | 1948 | 55 | 60 | 51 |
| | 1949 | 55 | 54 | 51 |
| | 1950 | 53 | 44 | 46 |
| | | Total | Bangkok | |
| Thailand | 1931-35 | 100 | 100 | |
| | 1936-38 | 97 | 86 | |
| | 1946 | 96 | 80 | |
| | 1947 | 81 | 65 | |
| | 1948 | 69 | 45 | |
| | 1949 | 67 | 40 | |
| | 1950 | 63 | 38 | |

Fig. 1 -- Per cent of total population living in localities of 20,000 inhabitants or more

(Semi-logarithmic scale.)